Amendments to the Specification:

Please amend the specification as follows:

Please replace the paragraph starting at page 3, line 33, with the following rewritten paragraph:

The invention relates to the combination of features as described <u>herein</u> ~~in claim 1~~. ~~Specific features for preferred embodiments of the invention are set out in the dependent claims 2 to 6 and 10 to 13. The invented method is comprised by the combination of features as described in claim 7. Specific features of preferred methods are in claims 8 and 9. The use of the fine steel cord as a reinforcement for synchronous belts is claimed in claim 14.~~

Please replace the paragraph starting at page 4, line 6, with the following rewritten paragraph:

According a first aspect of the invention a fine steel cord for reinforcing a synchronous belt is <u>provided</u> ~~claimed~~. Plain carbon steel is preferably used. Such a steel generally comprises a minimum carbon content of 0.40 wt% C or at least 0.70 wt% C but most preferably at least 0.80 wt% C with a maximum of 1.1 wt% C, a manganese content ranging from 0.10 to 0.90 wt% Mn, the sulfur and phosphorous contents are each preferably kept below 0.03 wt%; additional micro-alloying elements such as chromium (up to 0.2 to 0.4 wt%), boron, cobalt, nickel, vanadium – a non-exhaustive enumeration– may also be added. Also preferred are stainless steels. Stainless steels contain a minimum of 12 wt% Cr and a substantial amount of nickel. More preferred are austenitic stainless steels, which lend themselves more to cold forming. The most preferred compositions are known in the art as AISI (American Iron and Steel Institute) 302, AISI 301, AISI 304 and AISI 316.

Please replace the paragraph starting at page 7, line 18, with the following rewritten paragraph:

Fine steel cords according the invention have a structural elongation below 0.09 % ~~(claim 1)~~ and preferably below 0.06% ~~(claim 2)~~.

Please replace the paragraph starting at page 7, line 21, with the following rewritten paragraph:

A further characteristic of the invention ~~(claim 3)~~ is that the load-elongation curve below 20% of the breaking load does not show the non-linear curve as is typical for the state-of-the-art cords. The elongation behavior ~~behaviour~~ of the cord at loads below 20% of its breaking load fairly accurately follows a linear Hooke's law. The load-elongation curve of the invention cords remains between two straight lines that are separated by an elongation of 0.06% thus confining the load-elongation curve in a straight band. The load-elongation curves remain in this band from the second cycle onward – i.e. excluding the 'setting of the cord' – up to the twentieth cycle.

Please replace the paragraph starting at page 7, line 32, with the following rewritten paragraph:

Also the slope exhibited by this band is markedly different from that of the prior art cords. If we consider the slope between the lower - i.e. the turning point at 0.2% of the breaking load - and upper turning point - i.e. the turning point at 20% of the breaking load - divided by the metallic surface of the wires as an 'equivalent elongation modulus' (as illustrated by the slope of line 'G' in figure 1), the invention cords have an equivalent elongation modulus exceeding 150 000 MPa ~~(claim 4)~~ and more preferably exceeding 170 000 MPa ~~(claim 5)~~. This is already much closer to the theoretical achievable maximum of about 200 000 MPa for a single wire. This equivalent elongation modulus is also known as the secant modulus between defined forces (see K. Feyrer, "Drahtseil, 2. Auflage", page 81).

Please replace the paragraph starting at page 8, line 10, with the following rewritten paragraph:

In combination with the features above a favourable setting of the cord is provided ~~claimed (claim 6)~~. The 'setting of the cord' can be conveniently quantified as the elongation at first cycle, the cycle comprising: pre-tensioning the cord at 0.2% of its breaking load, loading the cord to 20% of its breaking load followed by unloading the cord to 0.2% of its breaking load. The elongation then measured is the 'setting elongation' (see 'A' of Figure 1). It will be clear to the person skilled in the art that 'the setting of the cord' can only be determined on cords that have not been loaded before. This setting elongation remains below 0.03% for the invention cords.

Please replace the paragraph starting at page 8, line 21, with the following rewritten paragraph:

The fine steel cord can also be coated with an elastomer coating ~~(claim 10)~~. By preference this coating encloses a single fine steel cord and is round and thin. The elastomer is by preference polyurethane as this is the material normally used to make timing belts and is therefore compatible ~~(claim 11)~~.

Please replace the paragraph starting at page 8, line 26, with the following rewritten paragraph:

Such a coating must adhere well to the fine steel cord in order to maintain the integrity of the composite during use ~~(claim 12)~~. Adherence of the cord to the elastomer can be assessed through the ASTM 2229/93 pull-out test. Typically the pull-out force of the fine cord - having a diameter 'D' expressed in mm - embedded in an elastomer over a length 'L'

must be larger than 40×D×L Newton, but most preferred is if the elastomer adheres to the cord with a pull-out force that is larger than 50×D×L Newton.

Please replace the paragraph starting at page 8, line 34, with the following rewritten paragraph:

The penetration of the elastomer greatly helps to keep the filaments 'in place' during their use. It is therefore preferred that the elastomer penetrates at least the outer strands of the cord. Most preferred is that all individual filaments are completely surrounded by polymer over substantially the length of the fine cord ~~(claim 13)~~.

Please replace the paragraph starting at page 10, line 4, with the following rewritten paragraph:

All the product features ~~as described in the claims 1 through 6~~ are the consequence of the processing of the cords only. Indeed, the invention cords do not discriminate themselves from the state-of-the-art product in terms of known structural features such as steel composition, coating, filament diameters, strand and cord lay lengths. For example the increase in equivalent elongation modulus ~~as claimed in claim 4 and 5~~ has nothing to do with a change in lay length of the cord: they are exactly the same between invention cords and state-of-the-art cords. This feature is particularly mentioned, because it is known in the art that increasing the lay-length of the cord increases the modulus.

Please replace the paragraph starting at page 10, line 15, with the following rewritten paragraph:

The second aspect of the invention concerns a method to produce the inventive cord. According <u>to</u> this method the needed strands are produced having a number of twists n_s of at

the most N_s i.e. the number of twists the filaments must have in the strand of the final cord. Each of the necessary strand spools is mounted in an individual twister pay-off. A twister pay-off is a pay-off system that is able to increase the number of twists per unit length in the strand when turning in the same lay direction of the strand. Mutatis mutandis, the twister pay-off is able to reduce the number of twists per unit length of the strands when it is turning in the direction opposite to the lay direction of the strand. The number of twists added or subtracted is proportional to the ratio of rotational speed of the twister to the linear speed of the strand. Preferably the rotational speed is adjustable. Most preferable is that both speeds are adjustable.

Please replace the paragraph starting at page 11, line 16, with the following rewritten paragraph:

A first way to implement this insight was to increase the pay-off tension to an unusual high level ~~as described in claim 7~~. The pay-off tension is most conveniently expressed in terms of the ultimate breaking load of the strand. At least the pay-off tension must be higher than 15% of the strand's breaking load. Preferably it is above 20%. By increasing the pay-off tension, a torque is exerted on the strand that therefore tends to untwist and thereby starts to rotate during its travel from strand spool to cord spool. Due to this rotation, the total number of twists of the strand before entry into the cord is lowered.

Please replace the paragraph starting at page 11, line 26, with the following rewritten paragraph:

A second important feature of the method is that the entrance pulley of the bunching machine must be put under an angle with respect to the plane formed by entering and exiting cord ~~(claim 8)~~. After this pulley the cord is guided in a bow towards the reversing pulley at the end of the bow. Preferentially these pulleys are grooved. Even more preferred is that these pulleys have a U shaped grove larger than the diameter of the cord. Normally the

rotational axis of the entrance pulley is perpendicular to the plane formed by entering an exiting cord i.e. directed along the normal of that plane. According to the invention the entrance pulley axis is inclined with respect to this normal. The inclination is set such that the cord rolls in the U shaped groove in its closing direction. The closing direction is the rotational direction in which the number of twists on the cord increases. More preferred is that the axis of the pulley is rotated around the bisector of the lines formed by the entering and exiting cord. Even more preferred is that both entrance and reversing pulley are put under an angle ~~(claim 8)~~. The principle of putting the entrance and reversing pulleys under angle is to shift the point where the strands in the cord obtain their final number of twists to the assembly point. In this way the untwisting of the strands in the bow of the bunching machine is prevented. For clarity: in a state-of-the art bunching machine (no pulleys under angle) the cord receives half of its final number of twists at the entrance pulley and the other half of its final number of twists at the reversing pulley. Hence the strand is untwisted during its travel in the bow of the bunching machine while it gets its final position in the cord. In the cord the strand is thus fixed in a loosened state causing again too high structural elongation, which on its turn leads to the dimensional control problem of synchronous belts.

Please replace the paragraph starting at page 12, line 19, with the following rewritten paragraph:

A third feature of the invented method relates to the path the strand travels from strand spool to cord spool. There the inventors found that the path must not be obstructed by any type of guiding pieces, rollers, pulleys or any other device that could impede the rotation of the strand. Any of such devices leads to a restriction of the untwisting by the bunching machine, which should be prevented according the invention ~~(claim 9)~~.

Please replace the paragraph starting at page 12, line 27, with the following rewritten paragraph:

According a third aspect of the invention, the use of such cords for the reinforcement of synchronous belts is claimed ~~(claim 14)~~. Such a belts have an excellent dimensional control and remain stable during use.

Please replace the paragraph starting at page 20, line 2, with the following rewritten paragraph:

In a ~~sixth~~ fifth preferred embodiment, it was verified that the favorable ~~favourable~~ properties were not lost during making of the synchronous belt. A closed loop belt was produced with a 10 mm pitch and a length of 840 mm containing 16 cords of type 7×3×0.15. A first belt was produced with conventional process (CP) cords, a second belt was produced with the inventive process (IP) cords, and a third belt was made with IP cords, coated with PU. The belts had a breaking load of about 15 kN. They were cyclically loaded 10 times from a pretension of 100 N ('Low Load') to 5 kN ('High Load'). Although the measuring conditions are not exactly the same as for the cords, a comparison of the relevant parameters can still be made. Table 6 summarizes ~~summarises~~ the results: